

Patent Claims

1. A device to be used in healing processes, characterized in that it comprises a flexible double-walled inflatable tube segment (2).
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2. The device according to claim 1, characterized in that at least the outer wall (6) is thin-walled and elastically expandable.
- 10 3. The device according to either of claims 1 and 2, characterized in that at least the outer wall (6) of the tube body segment (2) has a wall thickness of a few microns.
- 15 4. The device according to one of claims 1 to 3, characterized in that said tube segment (2) is made of a transparent material.
- 20 5. The device according to one of claims 1 to 4, characterized in that said tube segment (2) is made of a polyurethane, a polyurethane/polyvinyl chloride mixture, or a comparable polyurethane-based material or a polymer having comparable expansion and processing characteristics.
- 25 6. The device according to one of claims 1 to 5, characterized in that said tube segment (2) is used as a tamponade device for body cavities.
7. The device according to one of claims 1 to 5, characterized in that said tube segment (2) is arranged for the reversible, sealing securement of a catheter at the end of a catheter shaft (15).
- 30 8. The device according to one of claims 1 to 7, characterized in that said tube segment (2) is formed by invaginating a single-walled tube section (1).
9. The device according to claim 8, characterized in that the ends (7, 9) of said tube section (1) are connected to a terminating device (10).
- 35 10. The device according to claim 9, characterized in that said terminating device (10) has the form of a pipe nipple.
11. The device according to claim 8, characterized in that at least one end (9) of said tube section (1) is fastened to a catheter shaft (15).

12. The device according to one of claims 1 to 11, characterized in that a channel (13) for the delivery and/or discharge of a fluid opens into the interior space (8) formed by said walls (4, 6) of said tube segment (2).
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13. The device according to one of claims 1 to 12, characterized in that said tube section (1) or a portion thereof is preformed as a single-walled tube with the shape of a roll before being fashioned into a tube segment (2) by invagination.
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14. The device according to claim 13, characterized in that the bulge produced vertically to the plane of rotation of said tube segment (2) by said invagination is thickened by said preforming.
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15. The device according to claim 13, characterized in that said tube section (1) is preformed in such a way that the tube portion (3) that forms the inner wall (4) of said tube segment (2) after invagination is smaller in cross section and has a greater wall thickness than the tube portion (5) forming the outer wall (6).
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16. The device according to one of claims 1 to 15, characterized in that said tube portion (3) is fashioned with a uniform wall thickness and a uniform inner diameter.
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17. The device according to one of claims 1 to 16, characterized in that said tube segment (2) is implemented with a residual volume.
18. The device according to one of claims 1 to 17, characterized in that said channel (13) is connected via a flexible connecting tube to a valve (14) disposed outside said tube segment (2).
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19. The device according to claim 18, characterized in that said valve (14) is implemented as a valve lip.
20. The device according to one of claims 1 to 18, characterized in that provided as valve (14) is a circular cuff made of flexible material and disposed between said tube ends (7, 9).
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21. The device according to one of claims 1 to 20, characterized in that slid onto said tube segment (2) is a clamping closure (21) having a longitudinally displaceable sleeve (22).
- 5 22. The device according to one of claims 1 to 20, characterized in that a collar-shaped abutment (16) is disposed on said pipe nipple (10) or catheter shaft (15).
- 10 23. The device according to one of claims 1 to 22, characterized in that a pressure sensor is contained in said interior space (20).
- 15 24. The device according to one of claims 1 to 23, characterized in that a medically active substance can be introduced into the interior space (8) enclosed by said tube segment (2).
- 20 25. The device according to claim 24, characterized in that said medically active substance has radioactive and/or chemotherapeutic properties. The device according to either of claims 24 and 25, characterized in that said tube segment (2) is covered in at least one subregion by a shield (21) and in that said shielding suppresses or decreases the medicinal activity of the substance in the shielded region.
- 25 26. The device according to one of claims 1 to 23, characterized in that a radiographic contrast medium can be introduced into the interior space (8) enclosed by said tube segment (2).
- 30 27. The device according to claims 1 to 27, characterized in that said tube segment has substances or bodies affixed to its surface.
- 35 28. The device according to claim 28 with substances affixed to its surface, characterized in that said substances are contained in at least one receptacle or support that is connected to said tube segment.
29. The device according to claim 29, characterized in that said substances are constituted by radioactive or chemotherapeutic agents.
30. The device according to claim 28 with bodies affixed to its surface, characterized in that said bodies are constituted by electrodes which are conducted to the outside.